

## Architecture and design of web application framework: a preliminary review

### Abstract:

Among the earliest issues to be solved regarding to web application (WA) architecture and design is the performance problem and business logic complexities due to some limitations in conventional CGI architecture. These issues arise when WA began to be used to provide services with a very high number of accesses by users and solve more complex problems such as large scale e-learning system, online banking, one-stop online shopping center, etc. Most of the solutions are not considering the complexity that also brought along with the new proposed architecture as long as the aforementioned issues can be solved. As WA evolved and used to solve more complex problems, the next phases of WA architecture and design research have going towards for more simplified design, further exploiting database technology maturity, and search for suitable aided-tools to facilitate on some aspects of WA development process. The research direction has also move towards on proposal for better insights on WA design via motivation or enforcement of particular design pattern and shows some awareness to the necessity for deep understanding on using technology appropriately as it was originally intended. Web application framework (WAF) that nowadays has been widely accepted for WA development has to be in tandem with the current research trends to provide better, profound and proven architecture-design inside the application.